

Title (en)

QUICK REGISTRATION OF COORDINATE SYSTEMS FOR ROBOTIC SURGERY

Title (de)

SCHNELLE REGISTRIERUNG VON KOORDINATENSYSTEMEN FÜR ROBOTHERCHIRURGIE

Title (fr)

ENREGISTREMENT RAPIDE DE SYSTÈMES DE COORDONNÉES POUR CHIRURGIE ROBOTIQUE

Publication

EP 3662857 B1 20240306 (EN)

Application

EP 19213798 A 20191205

Priority

US 201816211594 A 20181206

Abstract (en)

[origin: EP3662857A1] A method for controlling a robot, which moves an ensemble that includes an arm and a tool, includes receiving from the robot, at one or more times, an arm-tracking signal, which indicates an arm-pose of the arm relative to a robot coordinate system (RCS) of the robot, deriving, from the arm-tracking signal, respective RCS-poses of at least one portion of the ensemble, relative to the RCS, at the times, receiving, from a tracking system, a sensor-tracking signal, which indicates a sensor-pose of at least one sensor, which belongs to the tracking system and is coupled to the ensemble, relative to a tracking-system coordinate system (TCS) of the tracking system, deriving, from the sensor-tracking signal, respective TCS-poses of the portion of the ensemble, relative to the TCS, at the times, registering the RCS to the TCS based on the RCS-poses and the TCS-poses, and, based on the registering, controlling the robot.

IPC 8 full level

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CPC (source: CN EP IL US)

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Cited by

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EP 3662857 A1 20200610; **EP 3662857 B1 20240306**; CN 111281543 A 20200616; CN 111281543 B 20240730; IL 270512 A 20200630; IL 270512 B1 20230501; IL 270512 B2 20230901; JP 2020089731 A 20200611; JP 7430523 B2 20240213; US 11123142 B2 20210921; US 2020179064 A1 20200611

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